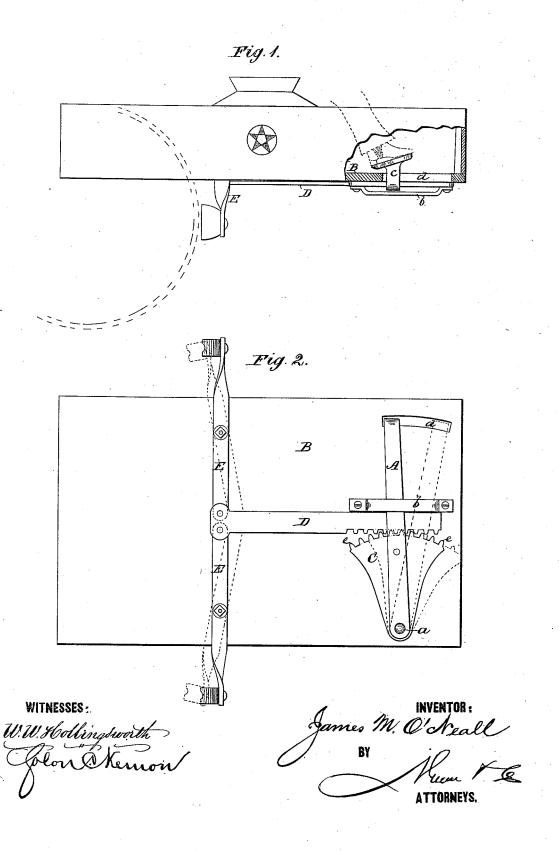
J. M. O'NEALL. WAGON-BRAKE.

No. 192,275.

Patented June 19, 1877.



N. PETERS, PHOTO-LITHOGRAPHER, WASRINGTON, D. C.

JNITED STATES PATENT

JAMES M. O'NEALL, OF FORT WORTH, TEXAS.

IMPROVEMENT IN WAGON-BRAKES.

Specification forming part of Letters Patent No. 192,275, dated June 19, 1877; application filed May 14, 1877.

To all whom it may concern:

Be it known that I, JAMES M. O'NEALL, of Fort Worth, in the county of Tarrant and State of Texas, have invented a new and Improved Buggy-Brake; and I do hereby declare that the following is a full, clear, and

exact description of the same.

My improved brake is designed to be attached to the under side of a buggy or wagon body in such manner that it may be operated by the foot of the driver applied to the bent arm of a lever, projecting up through a slot in the bed or floor. The said lever has a sector-shaped toothed portion, which meshes with a toothed sliding rack-bar, that is immediately connected with and operates the brake-levers proper, as hereinafter described.

In the accompanying drawing, forming part of this specification, Figure 1 is a side elevation of a buggy-body (part being broken out) having my improvement attached. Fig. 2 is

a bottom-plan view of the same.

The foot-lever A is arranged transversely of the buggy, pivoted at a, and works in a slotted guide, b. Its free end c is bent up ward, and projects through the slot d in the bottom B of the buggy or wagon, in such manner that the foot of the driver may be conveniently applied to it. The lever A is attached to, or else formed in one piece with, the sector-shaped piece C, which is also pivoted at the same point a, and provided with teeth e on its curved outer side. The sector C meshes with the rack-bar D, which is placed lengthwise of the floor B, and has a flexible connection with the inner ends of the pivoted

brake-levers E. The bar D slides in frictional contact with the guide b, and is thus held engaged with the sector C.

All the parts above named, composing the brake mechanism, lie in the same horizontal plane, and parallel to the bottom B of the buggy or wagon, excepting only the curved end c of lever A.

To operate the brake, the driver applies his foot to the part c, and pushes it forward in the slot d. The toothed sector C necessarily partakes of the movement of lever A, and thus the rack-bar is caused to slide forward and draw the inner ends of the brake-levers E in the same direction, so that the brakeshoes are applied to the wheels with a force and effect corresponding to the pressure exerted by the driver on the lever A.

This arrangement of brake mechanism obviates several objections to the use of leverbrakes on buggies, since the parts are out of the way, and not noticeable or prominently

visible from the sides of the vehicle.

What I claim is-

The foot-lever A, having an upwardly-curved end, c, the toothed sector C, the guide b, the sliding rack-bar D, and the pivoted brakelevers E, attached to the under side of a buggy or wagon body, having the slot d, all combined, substantially as shown and described, to operate as specified.

JAMES MADISON O'NEALL.

Witnesses:

J. J. MILLER, Solon C. Kemon.